What is claimed is:

1. An electrical coupler, comprising:

an inner connector element having opposing ends;

an upper end connector and an lower end connector; each end connector respectively coupled to one of said opposing ends of said inner connector element;

a thermally conductive flange circumscribing said inner connector; and

an outer connector element disposed over said inner connector and said thermally conductive flange.

2. The electrical coupler of claim 1 wherein said opposing ends of said inner connector element each comprise a bore, in which the upper and lower end connectors are disposed.

3. The electrical coupler of claim 1 wherein said thermally conductive flange is brazed to said inner connector.

4. The electrical coupler of claim 1 wherein said thermally conductive flange is fabricated from a ceramic material.

5. The electrical coupler of claim 1 wherein said thermally conductive flange is fabricated from the group comprising aluminum nitride and beryllium oxide.

6. The electrical coupler of claim 1 wherein said inner connector element is fabricated from beryllium copper.

7. The electrical coupler of claim 2 wherein said upper and lower end connectors are fabricated from beryllium copper.

8. The electrical coupler of claim 7 said upper and lower end connectors are plated with at least one electrical conductor.

9. The electrical coupler of claim 8 wherein said upper and lower end connectors are plated with successive layers of

nickel and gold.

10. The electrical coupler of claim 2 wherein said upper and lower end connectors each comprise a female banana connector disposed therein said bore.

11. The electrical coupler of claim 1 further comprising an upper male connector removably inserted into said upper end connector.

12. The electrical coupler of claim 11 wherein said upper male connector is fabricated from a thermally non-conductive material.

13. The electrical coupler of claim 12 wherein said upper male end connector is fabricated from stainless steel.

14. The electrical coupler of claim 12 wherein said upper male end connector is plated with at least one electrical conductor.

15. The electrical coupler of claim 14 wherein said upper male end connector is plated with successive layers of nickel, copper, nickel, gold.

16. The electrical coupler of claim 1 further comprising a lower male connector removably inserted into said lower end connector.

17. The electrical coupler of claim 16 wherein said lower male connector is fabricated from beryllium copper.

18. The electrical coupler of claim 16 wherein said lower male connector is plated with at least one electrical conductor.

19. The electrical coupler of claim 18 wherein said lower

male connector is plated with successive layers of nickel and gold.

20. The electrical coupler of claim 1 wherein said outer connector element is fabricated from silicone.

21. The electrical coupler of claim 1 wherein a portion of said thermally conductive flange circumscribing said inner connector is exposed from said outer connector element to transfer heat to a surrounding environment.

22. A support assembly for supporting a semiconductor wafer, comprising:

a chuck body having at least one electrode embedded therein; and

a cooling plate positioned beneath said chuck body; and an electrical coupler positioned within said cooling plate and having a thermally conductive flange circumscribing said electrical coupler and disposed upon a surface of said cooling plate.

23. The support assembly of claim 22 wherein said electrical coupler electrically interconnects said at least one electrode to chucking and biasing power sources for chucking and biasing said semiconductor wafer.

24. The support assembly of claim 23 wherein said electrical coupler further comprises:

an inner connector element having opposing ends;

an upper end connector and an lower end connector; each end connector respectively coupled to one of said opposing ends of said inner connector element;

a thermally conductive flange circumscribing said inner connector; and

an outer connector element disposed over said inner connector and said thermally conductive flange.

25. The support assembly of claim 24 wherein said opposing ends of said inner connector element each comprise a bore, in which the upper and lower end connectors are disposed.

26. The support assembly of claim 24 wherein said thermally conductive flange is brazed to said inner connector.

27. The support assembly of claim 24 wherein said thermally conductive flange is fabricated from a ceramic material.

28. The support assembly of claim 24 wherein said thermally conductive flange is fabricated from the group comprising aluminum nitride and beryllium oxide.

29. The support assembly of claim 24 wherein said inner connector element is fabricated from beryllium copper.

30. The support assembly of claim 25 wherein said upper and lower end connectors are fabricated from beryllium copper.

31. The support assembly of claim 30 said upper and lower end connectors are plated with at least one electrical conductor.

32. The support assembly of claim 31 wherein said upper and lower end connectors are plated with successive layers of nickel and gold.

33. The electrical coupler of claim 25 wherein said upper and lower end connectors each comprise a female banana connector disposed therein said bore.

34. The electrical coupler of claim 24 further comprising an upper male connector removably inserted into said upper end connector.

35. The electrical coupler of claim 34 wherein said upper

male connector is fabricated from a thermally non-conductive material.

36. The electrical coupler of claim 35 wherein said upper male end connector is fabricated from stainless steel.

37. The electrical coupler of claim 35 wherein said upper male end connector is plated with at least one electrical conductor.

38. The electrical coupler of claim 37 wherein said upper male end connector is plated with successive layers of nickel, copper, nickel, gold.

39. The electrical coupler of claim 24 further comprising a lower male connector removably inserted into said lower end connector.

40. The electrical coupler of claim 39 wherein said lower male connector is fabricated from beryllium copper.

41. The electrical coupler of claim 39 wherein said lower male connector is plated with at least one electrical conductor.

42. The electrical coupler of claim 41 wherein said lower male connector is plated with successive layers of nickel and gold.

43. The electrical coupler of claim 24 wherein said outer connector element is fabricated from silicone.

44. The electrical coupler of claim 24 wherein a portion of said thermally conductive flange circumscribing said inner connector is exposed from said outer connector element to transfer heat to a surrounding environment.